After the first paragraph on page 16 of the specification and before the heading "Detailed description of the invention" on line 14 on page 16 of the specification, please add the paragraph that is set forth in Appendix C.

REMARKS

This response is being submitted within the shortened two-month statutory period set for responding to the December 6, 2001 document entitled "NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES." (A copy of the document entitled "NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES" is enclosed herewith for the Examiner's convenience.) Therefore, a fee for an extension of time is not required.

In response to the December 6, 2001 document entitled "NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES," we are enclosing herewith a document entitled "Sequence Listing," which is a formal sequence listing. A copy of the "Sequence Listing" is included on the enclosed computer-readable diskette. Also enclosed herewith is a document entitled "Statement to Support Filing and Submission in Accordance with 37 C.F.R. §§ 1.821-1.825," which indicates that the formal written "Sequence

Listing" does not include new matter and that the information recorded on the computer-readable diskette is identical to the formal written "Sequence Listing."

The enclosed formal written "Sequence Listing" numbers 37 sequences (SEQ ID NOS: 1-37) that were not previously numbered in the originally filed U.S. patent application. Therefore, this response amends the first paragraph on page 30 of the specification to identify (and number) SEQ ID NOS: 1-10; this response amends the first paragraph on page 33 of the specification to identify (and number) SEQ ID NOS: 11-14; this response amends the first paragraph on page 34 of the specification to identify (and number) SEQ ID NOS: 15-22; this response amends the first paragraph on page 38 of the specification to identify (and number) SEQ ID NO: 23; this response amends the second paragraph on page 40 of the specification to identify (and number) SEQ ID NOS: 24-25; and this response amends page 16 of the specification to add a new paragraph that identifies (and numbers) SEQ ID NOS: 24-37, which are found in Figure 11.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to Deposit Account No. 12-0415. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 C.F.R § 1.136(a) requesting an extension of time of the number of months

necessary to make this response timely filed; and the petition fee due in connection therewith may be charged to deposit account No. 12-0415.

Respectfully submitted,

John Palmer
Attorney for the Applicant
Registration No.: 36,885
LADAS & PARRY
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Los Angeles, California 90036-5679
Telephone No.: (323) 934-2300
Facsimile No.: (323) 934-0202

Enclosures: A copy of the December 6, 2001 document entitled "NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES"

A document entitled "Sequence Listing"

Computer-readable diskette

A document entitled "Statement to Support Filing and Submission in Accordance with 37 C.F.R. §§ 1.821-1.825"

Appendix A

Appendix B

Appendix C

APPENDIX A

RE: U.S. Patent Application No. 09/845,042
Applicant: Filippo BELARDELLI, et al.
Title: "METHOD FOR GENERATING HIGHLY ACTIVE HUMAN DENDRITIC CELLS FROM MONOCYTES"
Our Ref.: B-4161 618742-8

Please replace the first paragraph on page 30 of the specification (see lines 1-15 on page 30) with the amended paragraph that is set forth below.

Transcripts were detected by amplifying the retro-transcribed RNA with specific primer pairs for:

- IL-1 (sense CTTCATCTTTGAAGAAGAACCTATCTTCTT (SEQ ID NO:1), antisense AATTTTTGGGATCTACACTCTCCAGCTGTA (SEQ ID NO:2)),

- TNFα (sense ATGAGCACTGAAAGCATGATCCGG (SEQ ID NO:3), antisense GCAATGATCCCAAAGTAGACCTGCCC (SEQ ID NO:4)),

- IL-12 p40 (sense CCAAGAACTTGCAGCTGAAGA (SEQ ID NO:5), antisense TGGGTCTATTCCGTTGTGTC (SEQ ID NO:6)),

- IL-15 (sense CTCGTCTAGAGCCAACTGGGTGAATGTAATAAG (SEQ ID NO:7), antisense TACTTACTCGAGGAATCAATTGCAATCAAGAAGTG (SEQ ID NO:8)),

- IL-18 (sense TCTGACTGTAGAGATAATGC (SEQ ID NO:9), antisense GAACAGTGAACATTATAGATC (SEQ ID NO:10));

GAPDH RT-PCR was run in parallel to normalize the levels of human RNA in all the samples. All RT-PCR products were in the linear range of amplification.

RE: U.S. Patent Application No. 09/845,042
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Title: "METHOD FOR GENERATING HIGHLY ACTIVE HUMAN DENDRITIC CELLS FROM MONOCYTES"
Our Ref.: B-4161 618742-8

Please replace the first paragraph on page 33 of the specification (see lines 1-23 on page 33) with the amended paragraph that is set forth below.

Mature DCs have been reported to respond to MIP-3 β/ELC and 6Ckine/SLC as a consequence of an up-regulation of their receptor (CCR7). Of interest, recent studies in knock-out mice for CCR7 have shown the crucial importance of the CCR7/MIP-3β interaction for the generation of a primary immune response (**25**). Thus, we evaluated the expression of CCR7 in IFN-DCs as compared to IL-4-DCs. Transcripts were detected by amplifying the retro-transcribed RNA with specific primer pairs for:

- hCCR7 (sense TCCTTCTCATCAGCAAGCTGTC (SEQ ID NO:11), antisense GAGGCAGCCCAGGTCCTTGAAG (SEQ ID NO:12));

- hMIP3β (sense CACCCTCCATGGCCCTGCTACT (SEQ ID NO:13) antisense TAACTGCTGCGGCGCTTCATCT (SEQ ID NO:14));

The samples were amplified for 25-35 cycles at the following conditions: 94°C 40'', 62°C 40'', 72°C 40''. To amplify hMIP-3β mRNA the annealing temperature was 58°C. α-actin RT-PCR was run in parallel to normalize the levels of human RNA in all the samples. All RT-PCR products were in the linear range of amplification. RT-PCR analysis revealed that IFN-DCs expressed higher levels of CCR7 mRNA as compared to IL-4-DCs, as shown in figure 8 (panel A), wherein the expression at mRNA level of the chemokine MIP-3β and its receptor CCR7 in IFN-DCs vs. IL-4-DCs is compared.

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In another set of studies, mRNA from DCs was extracted by RNAzol B and processed as previously described to detect the expression of a set of chemokines. The following primer sets were used:

- DC-CK1 (sense ACAAAGAGCTCTGCTGCCTC (SEQ ID NO:15), antisense CCCACTTCTTATTGGGGTCA (SEQ ID NO:16));
- TARC (sense CCTCCTCCTGGGGGCTTCTCTG (SEQ ID NO:17), antisense GACTTTAATCTGGGCCCTTTGTGC (SEQ ID NO:18));
- IP-10 (sense TGATTTGCTGCCTTATCTTTCTGA (SEQ ID NO:19) - antisense CAGCCTCTGTGTGGTCCATCCTTG (SEQ ID NO:20));
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Title: "METHOD FOR GENERATING HIGHLY ACTIVE HUMAN DENDRITIC CELLS FROM MONOCYTES"
Our Ref.: B-4161 618742-8

Please replace the first paragraph on page 38 of the specification (see lines 1-17 on page 38) with the amended paragraph that is set forth below.

and laboratory standards were included on each plate. Sera from non-reconstituted SCID mice were used as negative controls of all the ELISA determinations. ELISA for detection of specific anti-HIV antibodies was performed using a specific peptide (i.e., ERYLKDQQLLGIWGCSGKLIC (SEQ ID NO:23)) corresponding to amino acids 591 to 611 of the HIV-1 gp41 protein. Synthetic peptides were immobilised on Dynatec (Dynal, Oslo, Sweden) microtitre plates by an overnight incubation at 4°C. Serially diluted mouse sera were added and incubated for 90 min. at room temperature. Finally, binding was revealed by reading A_{490} values after incubation with substrate chromogen. Values represent mean adsorbance value of each individual serum tested in duplicate. The cut-off value was calculated as mean adsorbance value of all the control sera plus 0.100 A. Sera showing A_{490} values higher than this threshold were considered positive for anti-HIV antibodies.

APPENDIX A

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Our Ref.: B-4161 618742-8

Please replace the second paragraph on page 40 of the specification (see lines 27-35 on page 40) with the amended paragraph that is set forth below.

According to the results reported in Figure 11 as for donor LL, a significant increase was observed in the frequency of T cells reactive against the BMLF-1-derived peptide, in particular, but also of T cells specific for the LMP-2 (CLGGLLTMV (SEQ ID NO:24)) and EBNA 3C (LLDFVRFMGV (SEQ ID NO:25)) peptides. As for donor FZ, a significant expansion of T cells specific for both the EBNA 3A-derived peptides as well as for the EBNA 3B-derived peptide was stimulated by peptide-pulsed IFN-DCs. As for donor FB, particularly high frequencies of IFN-γ-

APPENDIX B

RE: U.S. Patent Application No. 09/845,042
Applicant: Filippo BELARDELLI, et al.
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Our Ref.: B-4161 618742-8

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APPENDIX B

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APPENDIX C

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Our Ref.: B-4161 618742-8

Please add the following paragraph after the first paragraph on page 16 of the specification and before the heading "Detailed description of the invention" on line 14 on page 16 of the specification.

In Figure 11,

LMP-2 (CLGGLLTMV) is SEQ ID NO: 24;
EBNA 3C (LLDFVRFMGV) is SEQ ID NO: 25;
BMFL-1 (GLCTLVAML) is SEQ ID NO: 26;
LMP-2 (LLWTLVVLL) is SEQ ID NO: 27;
EBNA 3A (SVRDRLARL) is SEQ ID NO: 28;
gp350 (VLQWASLAV) is SEQ ID NO: 29;
FluMP (GILGFVTL) is SEQ ID NO: 30;

EBNA 3A (RLRAEQVK) is SEQ ID NO: 31;
EBNA 3A (YPLHEQHGM) is SEQ ID NO: 32;
EBNA 3B (AVLLHEESM) is SEQ ID NO: 33;

EBNA 3C (QPRAPIRPI) is SEQ ID NO: 34;
EBNA 3B (IVTDFSVIK) is SEQ ID NO: 35;
EBNA 3A (RPPIFIRRL) is SEQ ID NO: 36; and
EBNA 3B (AVFDRKSDAK) is SEQ ID NO: 37.